# Fermilab Energy Management Performance-Based Objectives and Measures for FY 2003-2004 31 January, 2003

Per discussions between the Fermi Area Office and Fermilab, Fermilab considers these measures to be of value. However, the measures are not part of the laboratory's performance measures for FY2003 and should not be included in the performance evaluation for FY2003. They are, however, subject to negotiations for inclusion into the Performance Measures for FY2004.

### **OBJECTIVE 1 (Required)**

Energy Management initiatives are managed consistent with a Comprehensive Energy Management Program and Plan that includes the minimum requirements of Department of Energy (DOE) Order 430.2A, Departmental Energy and Utilities Management.

### MEASURE 1

Comprehensive Energy Management Program and Plan (CEMP) has been updated to include minimum requirements of DOE O 430.2A and major facilities contracts contain the Contractor Requirements Document (CRD) of DOE O 430.2A.

# FY 2003 EXPECTATION 1

1. Energy requirements accomplished/requirements scheduled to be accomplished during the Fiscal Year in accordance with the CEMP > 0.75.

Gradient:

Far exceed expectations  $\geq 0.95$ Exceed expectations > 0.85Meets expectations > 0.75Needs improvement < 0.75

2. CRD, as appropriate, are incorporated into major facilities contracts and laboratory CEMP updated by March 31, 2003.

Gradient:

Far exceed expectations: CEMP updated by January 31, 2003, and as appropriate, CRD incorporated in accordance with DOE FAO schedule.

Exceed expectations CEMP updated by February 28, 2003, and as appropriate,

CRD incorporated in accordance with DOE FAO schedule.

Meets expectations: CEMP updated by March 31, 2003, and as appropriated, CRD

incorporated in accordance with DOE FAO schedule.

Needs improvement: CEMP updated after March 31, 2003, and as appropriate,

CRD incorporated in accordance with DOE FAO schedule.

# FY 2004 EXPECTATION 1

1. Energy requirements accomplished/requirements scheduled to be accomplished during the Fiscal Year in accordance with the CEMP > 0.75.

Gradient:

Far exceed expectations  $\geq 0.95$ Exceed expectations > 0.85Meets expectations > 0.75Needs improvement < 0.75

### **OBJECTIVE 2 (Required)**

Energy Use Reductions and Green House Gas reductions show continuous improvement and are on target toward meeting the DOE energy leadership goals consistent with DOE Order 430.2A.

### MEASURE 2

 $((PY-CY)/PY) \times 100 = percent reduction$ 

where PY = previous year Building energy use requirement per Element 2 of the CEMP and CY = current year Building energy use per gross square foot as reported in DOE's Energy Management System 4. Energy use in the I&L category is determined by accelerator operations and is therefore specifically excluded from this gross square foot measure.

## FY 2003 EXPECTATION 2

1. Energy use in Buildings per gross square foot is 2 percent less than the CEMP requirement of the previous year.

Gradient:

Far exceed expectations  $\geq 4\%$ Exceed expectations  $\geq 3\%$ Meets expectations  $\geq 2\%$ Needs improvement < 2%

2. Identify key parameters responsible for difference in Buildings energy use from previous year.

# FY 2004 EXPECTATION 2

1. Energy use in Buildings per gross square foot is 2 percent less than the CEMP requirement of the previous year.

Gradient:

Far exceed expectations  $\geq 4\%$ Exceed expectations  $\geq 3\%$ Meets expectations  $\geq 2\%$ Needs improvement < 2%

2. Identify key parameters responsible for difference in Buildings energy use from previous year.

#### **OBJECTIVE 3**

Purchases of energy efficient technologies include low standby power devices.

#### MEASURE 3

Federal Energy Management Program recommended low standby power devices are purchased.

#### FY 2003 EXPECTATION 3

1. Acquisition systems incorporate recommendations from FEMP's "Standby Power Data Center" at <a href="http://oahu.lbl.gov">http://oahu.lbl.gov</a> into purchasing decisions by 9/30/03.

Gradient:

Far exceed expectations FEMP recommendations incorporated before 7/31/03 Exceed expectations FEMP recommendations incorporated before 8/31/03

Meets expectations Needs improvement

FEMP recommendations incorporated before 9/30/03 FEMP recommendations incorporated after 9/30/03

### FY 2004 EXPECTATION 3

1. Demonstrate by example that low standby power devices have been purchased from five of the device types on FEMP's "Standby Power Data Center" at http://oahu.lbl.gov/level\_summary.html

Gradient:

Far exceed expectations  $\geq$  10 device types

Exceed expectations

> 7 device types

Meets expectations

≥ 5 device types

Needs improvement

< 5 device types

#### **OBJECTIVE 4**

Application of sustainable design principles to buildings.

### **MEASURE 4**

Sustainable design principles, including energy efficiency, are applied to building designs (i.e., Conceptual Design, Title I, and Title II).

# FY 2003 EXPECTATION 4

1. Sustainable design principles applied to new building designs as evidenced by the submission to FEMP of Energy Efficiency/Sustainable Design Reports for buildings of 10,000 gross square feet or greater, after completion of Title II Design; and

2. Demonstrate that a Leadership in Energy and Environmental Design (LEED) baseline evaluation has been performed on at least one building

Gradient:

Far exceed expectations 3 Performed

Exceed expectations

2 Performed

Meets expectations

1 Performed

Needs improvement

0 Performed

### FY 2004 EXPECTATION 4

1. Sustainable design principles applied to new building designs as evidenced by the submission to FEMP of Energy Efficiency/Sustainable Design Reports for buildings of 10,000 gross square feet or greater, after completion of Title II Design; and

2. Demonstrate that new Leadership in Energy and Environmental Design (LEED) measures have been adopted into design practices

Gradient:

Far exceed expectations

3 Measures adopted

Exceed expectations

2 Measures adopted

Meets expectations

1 Measures adopted

Needs improvement

0 Measures adopted